

amended the title to read --SUBSTRATE PROCESSING APPARATUS WITH LOCAL EXHAUST FOR REMOVING CONTAMINANTS-- to be more clearly indicative of the present invention. Applicant requests that the Examiner approve this new title.

**Allowable Subject Matter**

Applicant appreciates the Examiners indication that claims 10, 11, 16, and 18 would be allowable if rewritten in independent form, including all the limitations of their respective base claim and any intervening claims. For the reasons set forth below, applicant submits that all pending claims define over the prior art of record.

**Rejection Under 35 U.S.C. § 112, Second Paragraph**

Claims 14, 17 and 18 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. This rejection, insofar as it pertains to the presently pending claims, is respectfully traversed.

In response to the Examiner's indication that the phrase "a flexible exhaust pipe" in claim 4 is vague and indefinite, applicant has amended this phrase to read --exhaust pipe made of bendable material--. As discussed for example on page 17 of the specification, local exhaust lines 20, 21, and 22 are made of a bendable material according to a disclosed embodiment of the present invention.

Therefore, applicant submits that claim 14 is both supported by and definite in light of the specification.

In response to the Examiner's indication that the phrase "load lock chamber at a side region" renders claim 17 indefinite because it is unclear where the claimed gas supply and chamber exhaust are located, applicant has amended claim 17 to recite that the claimed gas supply is communicated with the claimed load lock chamber which has --a first region of said load lock chamber in which said substrate moves,-- and said chamber exhaust is communicated with said load lock chamber --at a second region of said load lock chamber in which said moving mechanism is provided--. Applicant submits that this amendment fully addresses the grounds of indefiniteness cited by the Examiner.

Although applicant has referred to a specific disclosed embodiment to address the rejection of claim 14 under 35 U.S.C. § 112, second paragraph, such a reference to a specifically disclosed embodiment has been made to establish that claim 14 is definite and supported by the disclosure, and should not be relied on to unduly limit the scope of claim 14, which instead should be afforded its broadest reasonable interpretation.

In view of the above, applicant respectfully requests reconsideration and withdrawal of the rejection under 35 U.S.C. § 112, second paragraph.

**Prior Art Rejection**

Claims 1-9, 12-15, 17, and 19 stand rejected under 35 U.S.C. § 102(b) as being anticipated by *Saeki* (U.S. Patent 5,223,001). This rejection, insofar as it pertains to the presently pending claims, is respectfully traversed.

As illustrated for example in Fig. 1., *Saeki* discloses a vacuum processing apparatus applicable, for example, to the manufacture of semiconductor wafers. The vacuum processing apparatus disclosed therein includes a load-lock chamber 1, a vacuum processing chamber 15, an exhaust pipe 2 connected at one end to the load-lock chamber 1 and connected at the other end to a vacuum pump 23, and a conveying mechanism which includes conveyor arms 5, a shaft 6, and a rotating/raising/lowering mechanism 20 for conveying a semiconductor wafer 4 within the load-lock chamber 1. The inner surface of the load-lock chamber ceiling includes a concave portion 7 in which the semiconductor wafer 4 is raised by the conveying mechanism so that when the load-lock chamber 1 undergoes an exhaust operation, the semiconductor wafer 4 is isolated from particles introduced into the load-lock chamber.

In *Saeki*, it appears that gas is introduced into the load-lock chamber 1, and exhaust of the load-lock chamber 1 is performed, while the semiconductor wafer 4 is housed in the concave portion 7, in a steady state manner. Consequently, applicant submits that *Saeki* fails disclose a substrate processing apparatus which includes, in combination with other features, a controller which "during movement of [a] substrate ... and exhausting of the dust generating portion of [a] moving mechanism... controls [a] flow rate regulator" provided in

one of a gas supply, a chamber exhaust, and local exhaust, as required by independent claim 1.

Likewise, applicant submits that *Saeki* fails to disclose or suggest a substrate processing apparatus which includes, in combination with other features, a controller "which compares the exhaust amount of [a] local exhaust with a predetermined amount to monitor the state of [the] local exhaust" as required by independent claim 12.

Still further, applicant submits that *Saeki* fails to disclose or suggest a substrate processing apparatus in which, in combination with other features, both a chamber exhaust for exhausting a load lock chamber and a local exhaust for locally exhausting a dust generating portion of a moving mechanism are communicated with a vacuum pump via "a first vacuum exhaust line connected to [the] vacuum pump" and "a second vacuum exhaust line which is communicated... with [the] first vacuum exhaust line" and "a local exhaust which is...communicated with [the] first vacuum exhaust line" respectively, as required by independent claim 15.

Claims 2-9, 13, 14, 17, and 19 are believed to define over *Saeki* at least based on their dependence from one of independent claims 1, 12, and 15.

In view of the above, applicant respectfully requests reconsideration and withdrawal of the prior art rejection under 35 U.S.C. § 102.

Newly added independent claim 28 defines a substrate processing apparatus which includes, in combination with other features, "a flow rate regulator" provided in one a gas supply, a chamber exhaust, and a local exhaust,

a "controller," and a "pressure detector," wherein "while locally exhausting [a] dust generating portion" of a substrate moving mechanism, "the inside pressure of [a] load lock chamber is kept greater than a pressure of [an] exhaust line." Applicant submits that *Saeki* likewise fails to disclose or suggest this combination of features, and therefore newly added claims 28 and 29 are believed to define over the prior art of record.

**Conclusion**

Pursuant to the provisions of 37 C.F.R. 1.17 and 1.136(a), the applicants hereby petition for an extension of three months to September 12, 1999, for the period in which to file a response to the outstanding Office Action. The required fee of \$870.00 is attached hereto.

If the Examiner has any questions or needs to discuss any matters dealing with this application, he is requested to contact D. Richard Anderson, Reg. No. 40,439 at (703) 205-8000 in the Washington, D.C. area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit

Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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